Examiner will be addressed below in the order they appear in the prior Office Action.

Applicants thank the Examiner for courtesies extended during a telephonic interview on January 31, 2002.

- 1-2. Applicants note with appreciation the acknowledgement of the amendment and declaration filed 10 September 2001.
- 3. Applicants note with appreciation the withdrawal of the rejections under 35 U.S.C. 112, second paragraph.
- 4. Claims 1-17 and 22-32 are rejected under 35 U.S.C. 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. To expedite prosecution, Applicants have amended the claims to more particularly point out the claimed subject matter. Such amendments are not in acquiescence of the rejection, and Applicants reserve the right to prosecute claims of similar or differing scope.

The specification provides ample support for methods of inhibiting the growth and proliferation of transformed cells (see, for example, pages 4, 13, and 15).

"a method for modulating the growth state of an lung tissue, or a cell thereof, e.g., by ectopically contacting the tissue, in vitro or in vivo, with a hedgehog therapeutic, a ptc therapeutic, or an fgf-10 therapeutic (described infra) in an amount effective to alter the rate (promote or inhibit) of proliferation of cells in the lung tissue, e.g., relative to the absence of administration of the hedgehog therapeutic or ptc therapeutic. The subject method can be used, for example, to modulate the growth state of epithelial and/or mesenchymal cells of a lung tissue, such as may be useful as part of a regimen for prevention of a disease state, or in the treatment of an existing disease state or other damage to the lung tissue." (page 4, lines 14-22)

"the subject compositions can be used to inhibit, rather then promote, growth of lung-derived tissue. For instance, certain of the compositions disclosed herein may be applied to the treatment or prevention of a variety of hyperplastic or neoplastic conditions. The method can find application for the treatment or prophylaxis of, e.g., used to inhibit the growth and metastasis of lung cancer cells." (page 15, line 26-page 16, line 1).

"transformed cells refer to cells which have spontaneously converted to a state of unrestrained growth, i.e., they have acquired the ability to grow through an indefinite number of divisions in culture. Transformed cells may be characterized by such terms as neoplastic, anaplastic, and/or hyperplastic, with respect to their loss of growth control." (page 13, line 14-18).

Furthermore, Fujita et al., cited by Applicants in the previous response, demonstrate that activation of hedgehog signaling stimulates cell proliferation in certain lung cancer cell lines, and suppression of hedgehog signaling (using a hedgehog antibody) inhibits growth of these lung cancer cells. Fujita et al. additionally demonstrate that the effects of perturbing hedgehog signaling are observed in lung cancer cell lines which express hedgehog.

Applicants contend that the amended claims are enabled throughout their scope. The specification provides ample support for methods of inhibiting proliferation and growth of lung cancer cells using a hedgehog antagonist, and Applicants disclosure is further supported by the findings of Fujita et al. Accordingly, the claims are enabled throughout their scope. Reconsideration and withdrawal of the rejection is respectfully requested.

5. Claims 16 and 17 are rejected under 35 U.S.C. 112, second paragraph. To expedite prosecution, Applicants have canceled claims 16 and 17, obviating the rejection. Cancellation of the claims is not in acquiescence of the rejection, and Applicants reserve the right to prosecute claims of similar or differing scope. Reconsideration and withdrawal of the rejection is requested.

## **CONCLUSION**

For the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the pending rejections. Applicants believe that the claims are now in condition for allowance and early notification to this effect is earnestly solicited. Any questions arising from this submission may be directed to the undersigned at (617) 951-7000.

If there are any other fees due in connection with the filing of this Reply, please charge the fees to our **Deposit Account No. 18-1945.** If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit account.

Date: February 25, 2002

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Respectfully Submitted,

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